Amendments to the Claims

1. (currently amended) A method for reducing a pro-multiple sclerosis immune response in a human ~~an~~ individual, wherein the pro-MS immune response comprises a humoral immune response induced against an epitope comprising terminal alpha 2,6 linked sialic acid on shed antigen, the method comprising administering to the individual a composition comprising an affinity ligand which selectively binds to ~~a B cell~~ determinant expressed on B cells of the individual and not expressed by immune cells other than B cells except for dendritic cells when the determinant is CD21, wherein the ~~B cell~~ determinant expressed on B cells is selected from the group consisting of CD19, CD20, CD21, CD22, Lym-1, and a determinant expressed ~~only~~ by B cells and not expressed by immune cells other than B cells; wherein the B cells targeted by the method and by the composition are nonmalignant B cells, wherein the composition is administered in an amount effective to deplete B cells, and wherein treatment of the individual with the composition ~~the depletion of B cells~~ results in reducing the pro-multiple sclerosis immune response ~~induced against the epitope comprising terminal alpha 2,6 linked sialic acid~~.

2-17. (cancelled)

18. (previously presented) The method according to claim 1, wherein the nonmalignant B cells are B cells selected from the group consisting of mature B cells, memory B cells, $CD19^{+}sTn^{+}$ B cells, $CD19^{+}CD21^{+}sTn^{+}$ B cells, and $CD19^{+}CD5^{+}sTn^{+}$ B cells, and a combination thereof.

19. (withdrawn) The method according to claim 1, wherein the composition comprises a chimeric anti-CD20 monoclonal antibody.

20. (previously presented) The method according to claim 1, wherein the composition is administered parenterally, or in a site directed method in which the composition is

delivered into an access that directly supplies central nervous tissue undergoing demyelination.

21. (previously presented) The method according to claim 1, wherein the composition further comprises an additional component selected from the group consisting of one or more chemotherapeutic agents, an anti-inflammatory agent, a cytolytic agent, a pharmaceutically acceptable carrier, and a combination thereof.

22. (previously presented) The method according to claim 1, wherein the shed antigen comprises a glycolipid comprising one or more epitopes comprising terminal alpha 2,6 linked sialic acid.

23. (previously presented) The method according to claim 22, wherein glycolipid comprises a ganglioside.

24. (previously presented) The method according to claim 1, wherein the composition comprises an antibody.

25. (withdrawn) The method according to claim 1, wherein the composition is administered intravenously.

26. (currently amended) A site-directed method for reducing a pro-multiple sclerosis immune response in ~~an~~ a human individual, wherein the pro-multiple sclerosis immune response is a humoral immune response induced against an epitope comprising a terminal alpha 2,6 linked sialic acid on shed antigen, the method comprising administering to the individual a composition comprising an affinity ligand, which selectively binds to ~~a B cell~~ determinant expressed on B cells of the individual and not expressed by immune cells other than B cells except for dendritic cells when the determinant is CD21, wherein the ~~B cell~~ determinant expressed on B cells is selected from the group consisting of CD19, CD20, CD21, CD22, Lym-1, and a determinant expressed ~~only~~ by B cells and not expressed by immune cells other than B cells;

wherein B cells targeted by the method and by the composition are nonmalignant B cells, wherein the composition is delivered into an access that directly supplies central nervous tissue undergoing demyelination, wherein the composition is administered in an amount effective to deplete B cells, and wherein treatment of the individual with the composition ~~the depletion of B cells~~ results in reducing the pro-multiple sclerosis immune response ~~induced against the epitope comprising terminal alpha 2,6 linked sialic acid epitope~~.

27. (previously presented) The method according to claim 26, wherein the nonmalignant B cells are B cells selected from the group consisting of mature B cells, memory B cells, $CD19^+sTn^+$ B cells, $CD19^+CD21^+sTn^+$ B cells, and $CD19^+CD5^+sTn^+$ B cells, and a combination thereof.

28. (withdrawn) The method according to claim 26, wherein the composition comprises a chimeric anti-CD20 monoclonal antibody.

29. (previously presented) The method according to claim 26, wherein the composition further comprises an additional component selected from the group consisting of one or more chemotherapeutic agents, an anti-inflammatory agent, a cytolytic agent, a pharmaceutically acceptable carrier, and a combination thereof.

30. (previously presented) The method according to claim 26, wherein the shed antigen comprises a glycolipid comprising one or more epitopes comprising terminal alpha 2,6 linked sialic acid.

31. (previously presented) The method according to claim 30, wherein glycolipid comprises a ganglioside.

32. (previously presented) The method according to claim 26, wherein the composition comprises an antibody.

33. (currently amended) A method for reducing a pro-multiple sclerosis immune response in ~~an~~ human individual, wherein the pro-multiple sclerosis immune response is directed against an epitope comprising terminal alpha 2,6 linked sialic acid contained on shed antigen comprising a glycolipid, the method comprising administering to the individual a composition comprising a monoclonal antibody, wherein the monoclonal antibody binds to ~~a B cell~~ determinant expressed on B cells of the individual and not expressed by immune cells other than B cells except for dendritic cells when the determinant is CD21, wherein the determinant is selected from the group consisting of CD19, CD20, CD21, CD22, Lym-1, and a determinant expressed ~~only~~ by B cells and not expressed by immune cells other than B cells; wherein B cells targeted by the method and by the composition are nonmalignant B cells, ~~and~~ wherein the composition is administered in an amount effective to deplete B cells, and wherein treatment of the individual with the composition results in reduction of the ~~such that said~~ pro-MS immune response ~~is reduced~~.

34. (previously presented) The method according to claim 33, wherein the nonmalignant B cells are B cells selected from the group consisting of mature B cells, memory B cells, $CD19^+sTn^+$ B cells, $CD19^+CD21^+sTn^+$ B cells, and $CD19^+CD5^+sTn^+$ B cells, and a combination thereof.

35. (withdrawn) The method according to claim 33, wherein the monoclonal antibody comprises a chimeric anti-CD20 monoclonal antibody.

36. (previously presented) The method according to claim 33, wherein the composition further comprises an additional component selected from the group consisting of one or more chemotherapeutic agents, an anti-inflammatory agent, a cytolytic agent, a pharmaceutically acceptable carrier, and a combination thereof.

37. (previously presented) The method according to claim 33, wherein glycolipid comprises a ganglioside.

38. (currently amended) A method for treating inflammation associated with multiple sclerosis~~, wherein the inflammation is caused by a humoral immune response against a shed antigen comprising an epitope comprising a terminal alpha 2,6 linked sialic acid~~, the method comprising depleting B cells in an human individual ~~to inhibit said humoral immune response~~ by administering to the individual an amount of a composition effective to deplete B cells and reduce a ~~said~~ humoral immune response against a ~~the~~ shed antigen comprising an epitope comprising a terminal alpha 2,6 linked sialic acid, wherein the inflammation is caused by a humoral immune response against a shed antigen, wherein the composition comprises an affinity ligand which binds to ~~a B cell~~ determinant expressed on B cells of the individual and not expressed by immune cells other than B cells except for dendritic cells when the determinant is CD21, wherein the determinant is selected from the group consisting of CD19, CD20, CD21, CD22, Lym-1, and a determinant expressed ~~only~~ by the B cells and not expressed by immune cells other than B cells; and wherein B cells targeted by the method and by the composition are nonmalignant B cells.

39. (previously presented) The method according to claim 38, wherein the nonmalignant B cells are B cells selected from the group consisting of mature B cells, memory B cells, $CD19^{+}sTn^{+}$ B cells, $CD19^{+}CD21^{+}sTn^{+}$ B cells, and $CD19^{+}CD5^{+}sTn^{+}$ B cells, or a combination thereof.

40. (withdrawn) The method according to claim 38, wherein the composition comprises a chimeric anti-CD20 monoclonal antibody.

41. (previously presented) The method according to claim 38, wherein the composition further comprises an additional component selected from the group consisting of one or more chemotherapeutic agents, an anti-inflammatory agent, a cytolytic agent, a pharmaceutically acceptable carrier, and a combination thereof.

42. (previously presented) The method according to claim 38, wherein the composition comprises a monoclonal antibody.

43. (previously presented) The method according to claim 38, wherein the shed antigen comprises a glycolipid comprising one or more epitopes comprising terminal alpha 2,6 linked sialic acid.

44. (previously presented) The method according to claim 43, wherein glycolipid comprises a ganglioside.

45. (Currently amended) A method for reducing a pro-multiple sclerosis immune response comprising administering to ~~an~~ human individual an affinity ligand which selectively binds to ~~a B cell~~ determinant of ~~a shed antigen specific B cell~~ subpopulation of B cells altered in relative amount in a human individual with a pro-multiple sclerosis immune response, wherein the determinant is not expressed by immune cells other than B cells except for dendritic cells when the determinant is CD21, wherein the B cells are nonmalignant B cells, and wherein the affinity ligand is administered in an amount effective to deplete B cells.

46. (Currently amended) The method according to claim 45, wherein the ~~B cell~~ determinant is selected from the group consisting of CD19, CD20, CD21, CD22, Lym-1 and a determinant expressed ~~only~~ by the B cells and not expressed by immune cells other than B cells.

47. (previously presented) The method according to claim 45, wherein the nonmalignant B cells are B cells selected from the group consisting of mature B cells, memory B cells, $CD19^+sTn^+$ B cells, $CD19^+CD21^+sTn^+$ B cells, and $CD19^+CD5^+sTn^+$ B cells, or a combination thereof.

48. (previously presented) The method according to claim 45, wherein the ~~shed antigen specific~~ B cells have ~~specificity for an epitope~~ been activated by shed antigen comprising terminal alpha 2, 6 linked sialic acid.